CorkSport Mazda 3 Adjustable Shifter

2010- 2013 Mazdaspeed 3, 2010-2013 Mazda 3 6-speed and 2012-2013 Mazda3 SkyActiv 6-speed

The CorkSport Adjustable Short Shifter designed as a direct OEM replacement, maintains OEM fitment and allows you to independently adjust shift throw distance and shift knob height. Designed to easily replace the OEM plastic design with a durable machined aluminum body to handle a variety of shifting styles from the casual to aggressive driver. Please let us know your feedback of the CorkSport Mazda 3 adjustable Shifter by submitting a review at: http://www.corksport.com/corksport-adjustable-short-shifter-mazdaspeed-3-mazda-3.html

Pre-Installation Notes:

Read through these instructions before starting installation. Section 7 covers shifter operation and adjustment procedures.

Make sure your clothes, tools and hands are clean while working on the interior of your car.

These instructions were written for reference only and the use of a factory service manual is recommended.

How our instructions work: To best cover all of our customers experience levels, we have included an overview checklist for the more technically advanced users along with step-by-step instructions for customers that require additional detail.

These in car installation photos were produced using a 2012-2013 Mazdaspeed 3. 2010-2011 Mazdaspeed 3 and SkyActiv will be very similar.

Materials and Time:

General Info.

Part #: Axl-6-963-10/-12
Time Est: 1 hours
Wrench Rating: 3/5

Tooling List

5mm Allen Wrench
10mm Wrench
10mm ¼" Socket Wrench
Long ¼" Socket Extension
T-20 Torx Screwdriver
Door Panel Removal Tool (or two Large Flat Head Screw Drivers)
Hose Removal Tool
Needle Nose Pliers
White Lithium Grease

Parts List

One (1) Adjustable Short Shifter
One (1) M6 Lock Nut
One (1) M6x10mm Ball Stud

Part # Axl-6-963

Checklist

This is an overview of each step in the build. You can use this as a reference and a checklist as you button up the work on your car

These in car installation instructions were produced using a 2013 Mazdaspeed 3. 2010-2011 Mazdaspeed 3 and SkyActiv will be very similar.

1. Remove the Factory Shifter Housing

- [ ] **a) Remove the shift knob** by firmly twisting it counter-clockwise (Figure 1a).
- [ ] **b) Remove the center console panel that houses the cup holder.** Pull the cup holder panel upward by hand grasping between the cup holder and E-brake slot (Figure 1a).
- [ ] **c) Remove the center console panel that houses the ashtray and shift boot**. Pull upward on the panel by hand and place it off to the side (Figure 1b and 1c).
- [ ] **d) Use a door panel removal tool to pry the shift cable ends** off the shifter ball studs (Figure 1d).
- [ ] **e) Remove the shifter cables from the shifter housing**. Squeeze together the two locking tabs and slide the cable upwards out of the shifter housing (Figure 1e).
- [ ] **f) Slide the electrical plug off the shifter housing** (Figure 1f).
- [ ] **g) Remove the four (4) shifter housing mounting screws** using a 10mm socket wrench (Figure 1g).
- [ ] **h) Lift the shifter housing out of the center console.**

Remove the Factory Shifter From the Shifter Housing

To install the adjustable shifter into **2012-2013** Mazdaspeed 3 proceed to **Sections 2-3**.

To install the adjustable shifter into **2010-2011** Mazdaspeed 3 and SkyActiv 6 speed models skip to **Sections 3-4**.

Section 7 covers shifter operation and adjustment procedures.

(2012-2013 Mazdaspeed)

2. Remove the Factory Shifter From the Shifter Housing

- [ ] **a) Very carefully, remove the plastic retainer** (shown in Figure 2a). This step is best done with a small pick tool and flat blade screw driver.

Do not break the tabs off of the clip. You will re-use the clip and they cannot be purchased separately from the entire shifting mechanism.

- [ ] **b) Pull the side motion actuator out of the shifter housing** (Figure 2b).
- [ ] **c) Remove the white plastic cap from the ball stud** (green arrow in Figure 2c).
- [ ] **d) Remove the spring from the shifter assembly** (Figure 2c).
- [ ] **e) Remove the T-20 Torx screw, and pull the metal retaining ring out of the shifter housing** (Figure 2d).
- [ ] **f) Remove the shifter from the housing.** Push the three (3) locking tabs (red arrows in Figure 2e) holding the shifter cup into the housing and pull up on the shifter simultaneously.
- [ ] **g) Remove the shifter cup and O-ring from the factory shifter** (Figure 2f).

3. Install the CorkSport Adjustable Shifter into the Shifter Housing

- [ ] **a) Apply white lithium grease to the Shifter Cup and place it onto the CorkSport Adjustable Shifter** (as shown in Figure 3a).
- [ ] **b) Place the O-ring into the groove at the bottom of the Shifter** (Figure 3b).
- [ ] **c) Place the assembled shifter into the shifter housing** (Figure 3c).
- [ ] **d) Guide the Side Action Spring through the groove in the shifter** and the holes in the back of in the shifter housing (as shown in Figure 3d).
- [ ] **e) Lubricate and snap the Ball Stud Plastic Cap** onto the shifter ball stud (Figure 3d).
- [ ] **f) Push the Side Action Actuator back into the shifter housing.** Line up the Ball Stud Plastic Cap with the hole in the Actuator (Figure 3e).
- [ ] **g) Lubricate and press the Plastic Retainer Clip** back onto the Side Action Actuator shaft (Figure 3f).
- [ ] **h) Replace the Metal Retaining Ring** and fasten it with the T-20 Torx screw.

Proceed to section 6 for installing assembled shifter.

(2010-2011 Mazdaspeed 3, and SkyActiv 6 speed models)

4. Remove the Factory Shifter From the Shifter Housing

- [ ] **a) Remove the metal retaining ring.** Remove the two (2) Torx screws and pull the metal ring from the shifter housing (Figure 4a).

- [ ] **b) Guide the lower side action spring arm down and towards the yellow colored side action actuator arm**. Free it from the peg molded into the shifter housing (red arrow in Figure 4b).

Use caution when removing the spring from it's position. Bending it from it's original shape will affect the operation of the shifter.

- [ ] **c) Pull the shift lever upward and remove it from the shifter housing** (Figure 4c and 4d).

5. Install the CorkSport Adjustable Shifter into the Shifter Housing

- [ ] **a) Remove the Shifter Cup, Ball Stud Plastic Cap and O-ring from the factory shifter** (Figure 5a).

- [ ] **b) Lubricate with white lithium grease and push the Shifter Cup onto the CorkSport Adjustable Shifter** (as shown in Figure 5a).

- [ ] **c) Lubricate and push the Ball Stud Plastic Cap onto the CorkSport Adjustable Shifter** (Figure 5b).

- [ ] **d) Place the O-ring into the groove at the bottom of the Shifter** (Figure 5b).

- [ ] **e) Place the assembled shifter partially into the shifter housing** (as shown in Figure 5c).

- [ ] **f) Spread the spring apart and guide it through the groove in the shifter** (as shown in Figure 5c).

- [ ] **g) Push the Ball Stud Plastic Cap into the hole in the side action actuator** and guide the shifter further down into the housing (Figure 5d).

- [ ] **h) Route the lower spring arm** (red arrow in Figure 5d) out of the groove in the shifter and around and under the plastic peg molded into the shifter housing (as shown in Figure 5e).

- [ ] **i) Replace the Metal Retaining Ring** and fasten it down with the two (2) T-20 Torx screws (Figure 5f).

- [ ] **j) Work the shifter in all directions to ensure proper installation and lubrication.**

6. Re-Install the Shifter Housing Back Into the Car

- [ ] **a) Guide the shifter housing assembly back into the center console.** Pull the shifter cables and wiring out of the way (Figure 6a).

- [ ] **b) Use a 10mm socket to fasten the four (4) screws you removed in step 1c** (Figure 6a).

- [ ] **c) Clip the shift cables back into their locations in the shifter housing** (Figure 6b).

- [ ] **d) Lock the shifter throw adjustment ball stud into place with two (2) 10mm wrenches** and push the shifter cable ends for both throw and side action cables onto the shifter (red arrows in Figure 6a).

Now is a good time to try different shifter settings.
See section 7 for adjusting shifter while it is still easily accessible.

- [ ] **e) Clip the wiring harness back onto the shifter housing** (Figure 1f).

- [ ] **f) Place the shift boot panel back onto the center console** (Figure 6c).

- [ ] **g) Push the shift boot section downward** any fully clip it back into place (Figure 6d).

- [ ] **h) Replace the center console panel with cup holders** (Figure 6e).

- [ ] **i) Screw the shift knob back onto the shifter by turning it clock wise** (Figure 6e).

Proceed to Section 7 in the detailed instructions for shifter operation and adjustment procedures.

This completes the installation of your CorkSport Adjustable Short Shifter. Before test driving, shift through all gears including REVERSE and verify FULL ENGAGEMENT for all gears. Check out our knowledgebase for additional install information.

Detailed Instructions

These in car installation photos were produced using a 2012-2013 Mazdaspeed 3. 2010-2011 Mazdaspeed 3 and SkyActiv 6 speed will be very similar. This instruction manual covers installation for both styles of shifter.

For *2010-2013 Mazdaspeed3 and 2010-2013 Mazda3* models use sections:

1 → 2 → 3 → 6 → 7

For *SkyActiv 6 speed models* use sections:

1 → 4 → 5 → 6 → 7

Figure 1a

1. Remove the Factory Shifter Housing

a) **Remove the shift knob** by firmly twisting it counter-clockwise (Figure 1a).

Figure 1b

b) **Remove the center console panel that houses the cup holder.** Pull upward by hand by grasping between the cup holder and E-brake slot. Carefully pull the panel up and over the E-brake handle (Figure 1a).

Figure 1c

c) **Remove the center console panel that houses the ashtray and shift boot**. Pull upward on the panel by hand, and place it off to the side (Figure 1b and 1c).

1. Remove the Factory Shifter Housing

d) Use a door panel removal tool to pry the shift cable ends off the shifter ball studs (Figure 1d).

Door panel tool may be substituted by using two large flat head screw drivers.

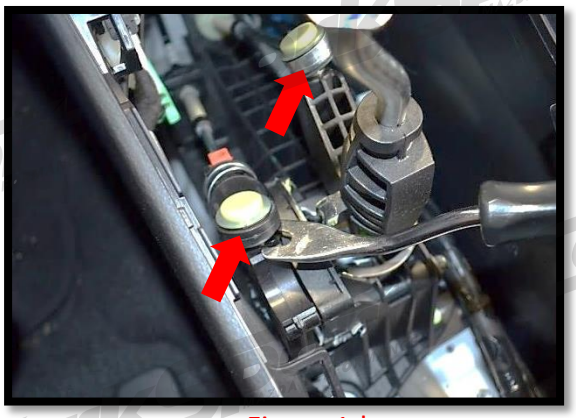
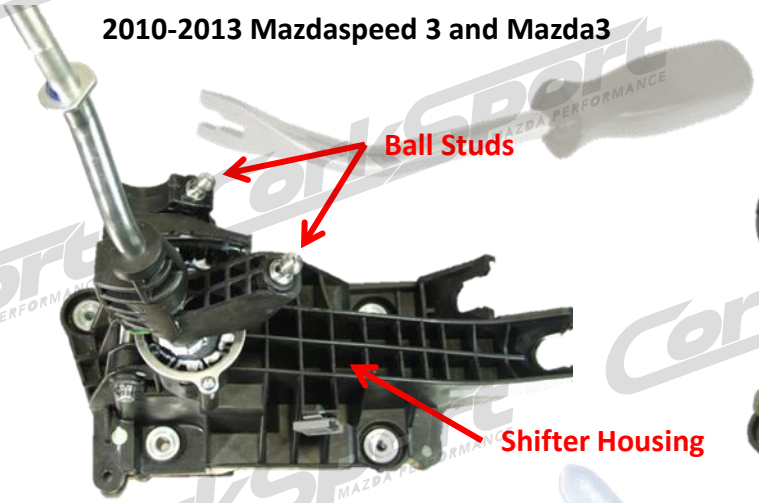
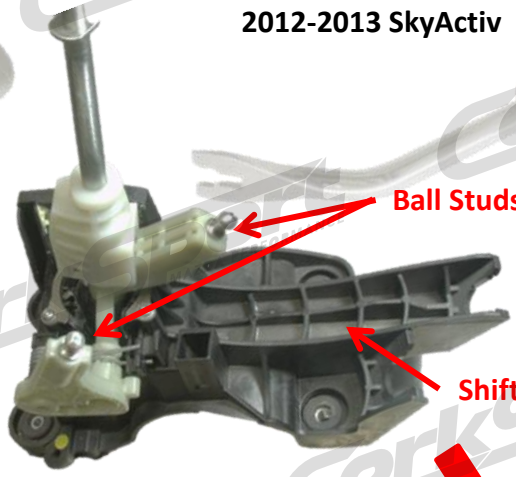


Figure 1d

2010-2013 Mazdaspeed 3 and Mazda3



2012-2013 SkyActiv



e) Remove the shifter cables from the shifter housing. Use a small pair of needle nose pliers to gently squeeze together the two locking tabs (red arrows in Figure 1e) and slide the cable upwards out of the shifter housing (green arrows in Figure 1e).

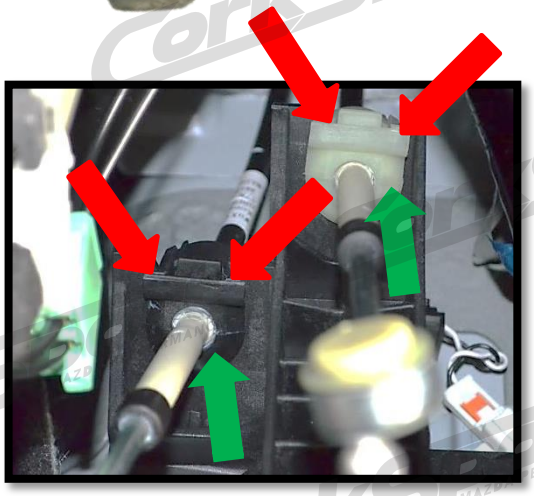


Figure 1e

f) Slide the electrical plug off the shifter housing and push it aside (Figure 1f).

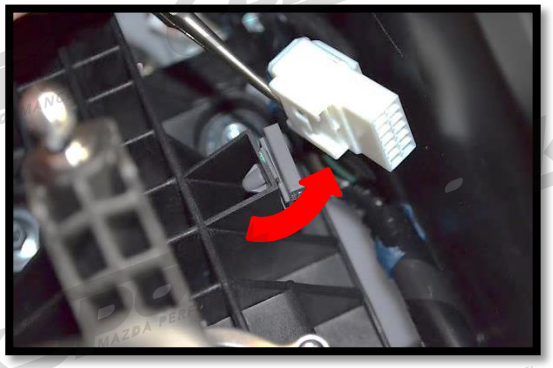


Figure 1f

1. Remove the Factory Shifter Housing (continued)

g) **Remove the four (4) shifter housing mounting screws** using a 10mm socket wrench with a long extension (red circles in Figure 1g).

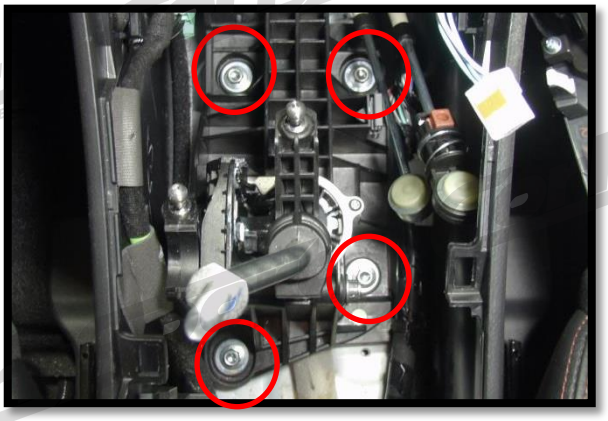


Figure 1g

h) **Lift the shifter housing out of the center console.**

2010-2013 Mazdaspeed 3
Axl-6-963 (-11 &-12)

2012-2013 SkyActiv
Axl-6-963-10

To install the adjustable shifter into **2010-2013** Mazdaspeed 3 and **2010-2013** Mazda3 proceed to **Sections 2-3**.

To install the adjustable shifter into **2012-2013** SkyActiv 6 speed models skip to **Sections 3-4**.

2. Remove the Factory Shifter From the Shifter Housing

(2010-2013 Mazdaspeed 3 and 2010-2013 Mazda 3)

a) Very carefully remove the plastic retainer (Figure 2a). This step is best done with a small pick tool and flat blade screw driver.

It helps to have either good patience or a good friend for this step.

Do not break the tabs off of the clip. You will re-use the clip and they cannot be purchased separately from the entire shifting mechanism.

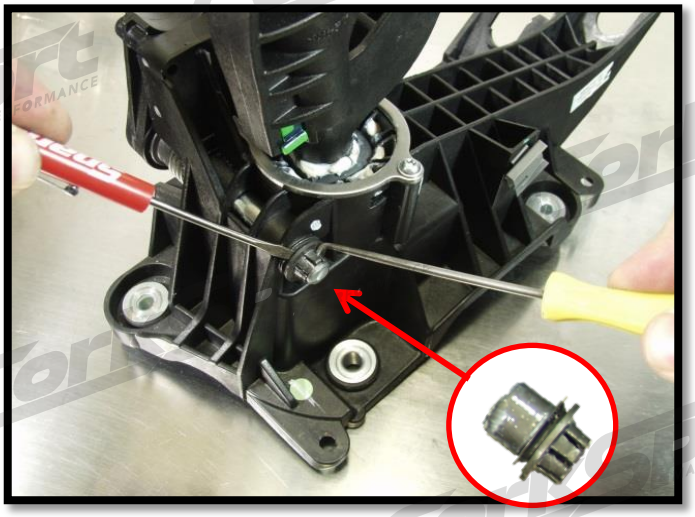


Figure 2a

b) Pull the side motion actuator out of the shifter housing (red arrow in Figure 2b).

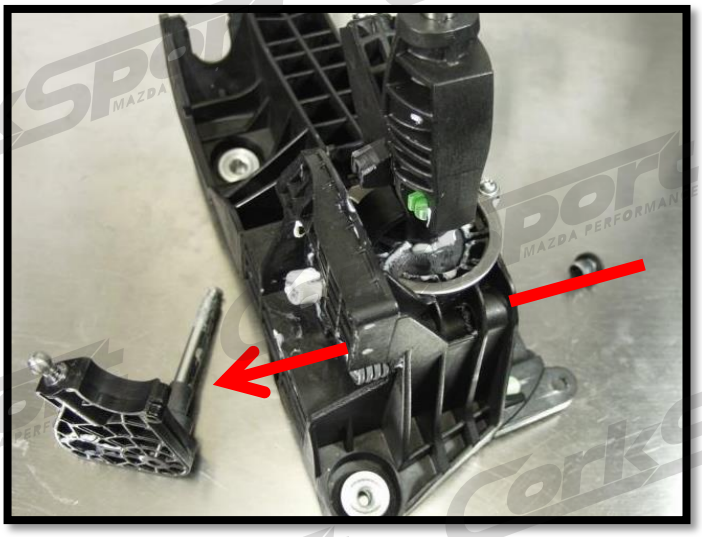


Figure 2b

c) Remove the white plastic cap from the ball stud (green arrow in Figure 2c).

d) Remove the spring (Figure 2c) **from the shifter assembly.**

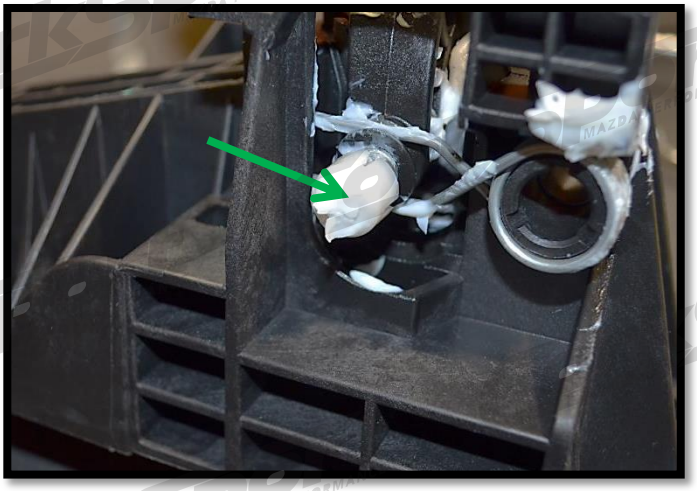


Figure 2c

2. Remove the Factory Shifter From the Shifter Housing (continued)

(2010-2013 Mazdaspeed 3 and 2010-2013 Mazda 3)

e) **Remove the T-20 Torx screw and pull the metal retaining ring out of the shifter housing** (red arrow in Figure 2d).

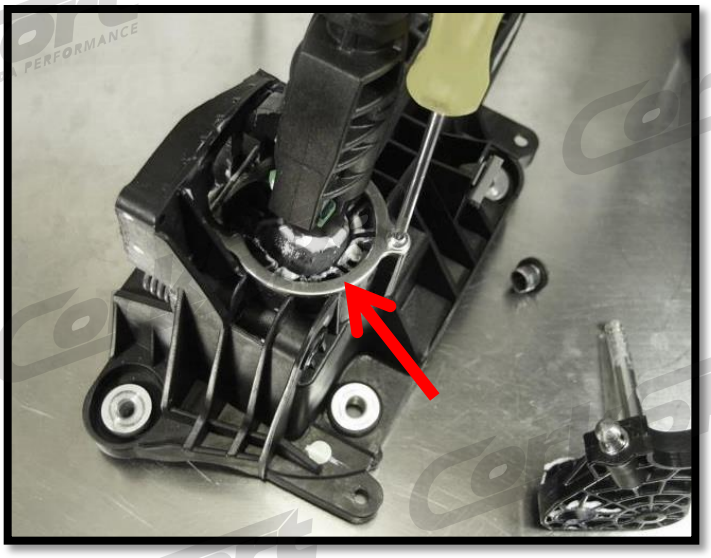


Figure 2d

f) **Remove the shifter from the housing.** Push in the three (3) locking tabs (red arrows in Figure 2e) holding the shifter cup into the housing, and pull up on the shifter simultaneously.

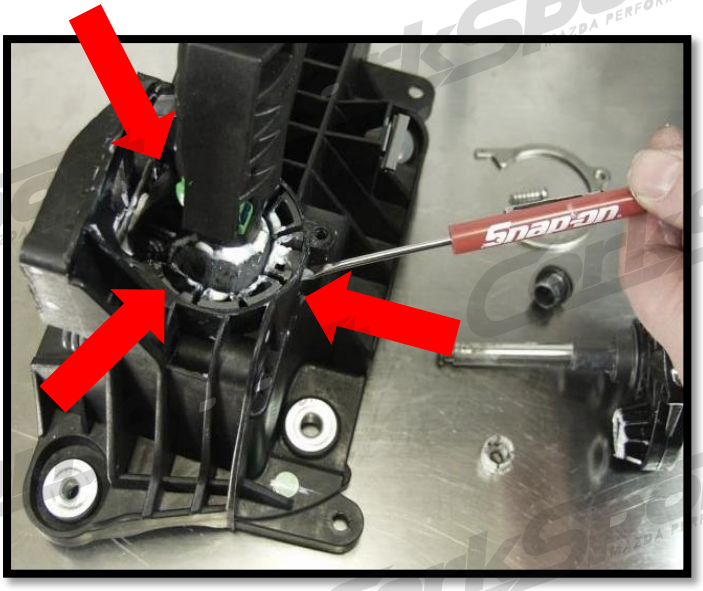


Figure 2e

g) **Remove the shifter cup and O-ring from the factory shifter** (Figure 2f).

Figure 2f

3. Install the CorkSport Adjustable Shifter into the Shifter Housing

(2010-2013 Mazdaspeed 3 and 2010-2013 Mazda 3)

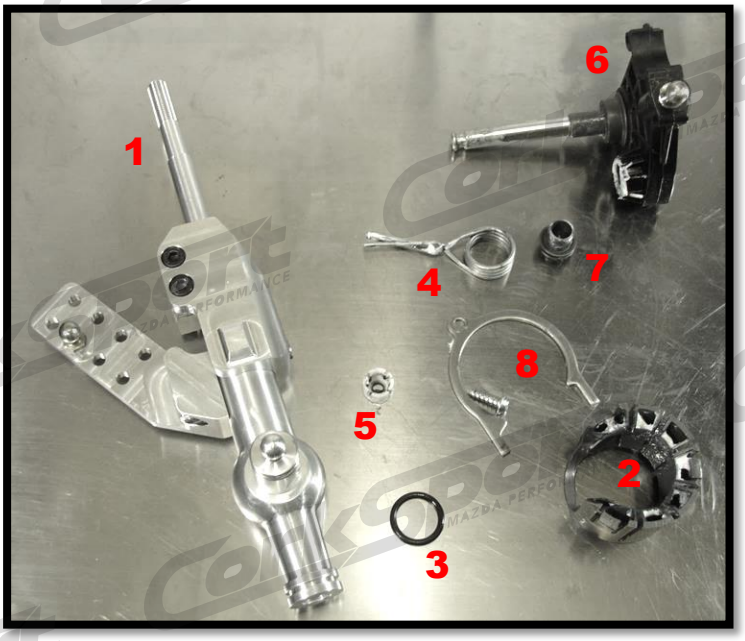


Figure 3a

1. **CorkSport Adjustable Shifter Assembly**
2. **Shifter Cup**
3. **O-ring**
4. **Side Action Spring**
5. **Ball Stud Plastic Cap**
6. **Side Action Actuator**
7. **Plastic Retainer Clip**
8. **Metal Retaining Ring and T-20 Torx Screw**

Figure 3b

O-ring Placed in groove

a) **Apply white lithium grease to the Shifter Cup (2) and place it onto the CorkSport Adjustable Shifter (1)** (as shown in Figure 3b).

b) **Place the O-ring (3) into the groove at the bottom of the Shifter (1)** (Figure 3b).

c) **Place the assembled shifter into the shifter housing** (as shown in Figure 3c).

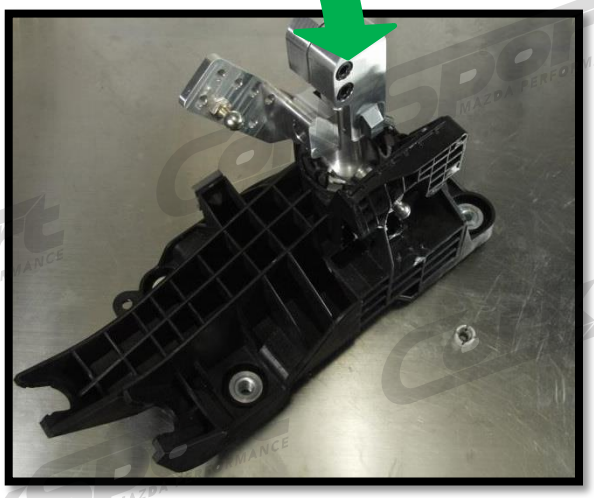


Figure 3c

d) **Guide the Side Action Spring (4) through the groove in the shifter** and the holes in the back of in the shifter housing (as shown in Figure 3d).

e) **Lubricate and snap the Ball Stud Plastic Cap (5)** onto the shifter ball stud (as shown in Figure 3d).

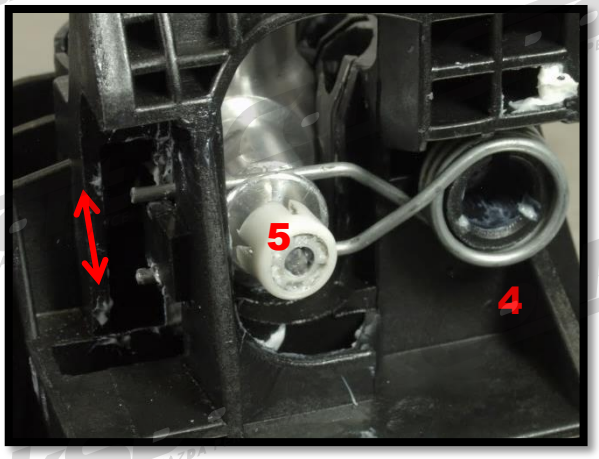


Figure 3d

3. Install the CorkSport Adjustable Shifter into the Shifter Housing (continued)

(2010-2013 Mazdaspeed 3 and 2010-2013 Mazda 3)

f) **Push the Side Action Actuator (6) back into the shifter housing.** Line up the Ball Stud Plastic Cap with the hole in the actuator (red arrow in Figure 3e).

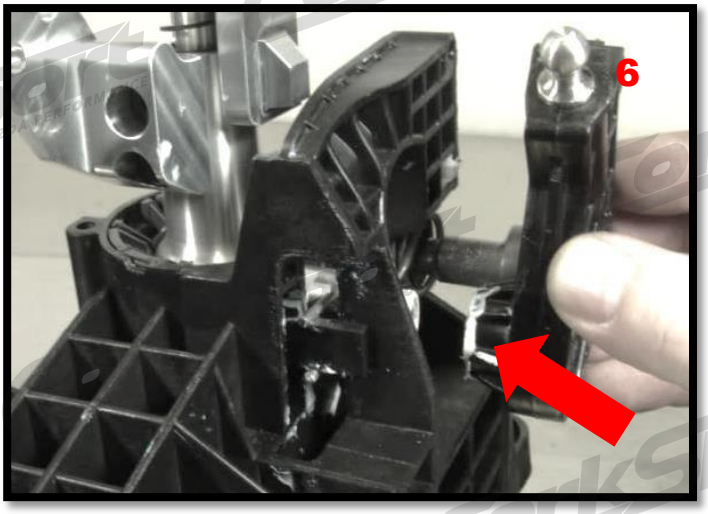


Figure 3e

g) **Lubricate with white lithium grease and press the Plastic Retainer Clip (7)** back onto the Side Action Actuator shaft (Figure 3f).

h) **Slide the two tabs of the Metal Retaining Ring (8) into the slots in the shifter housing**, and fasten it down with the T-20 Torx screw.

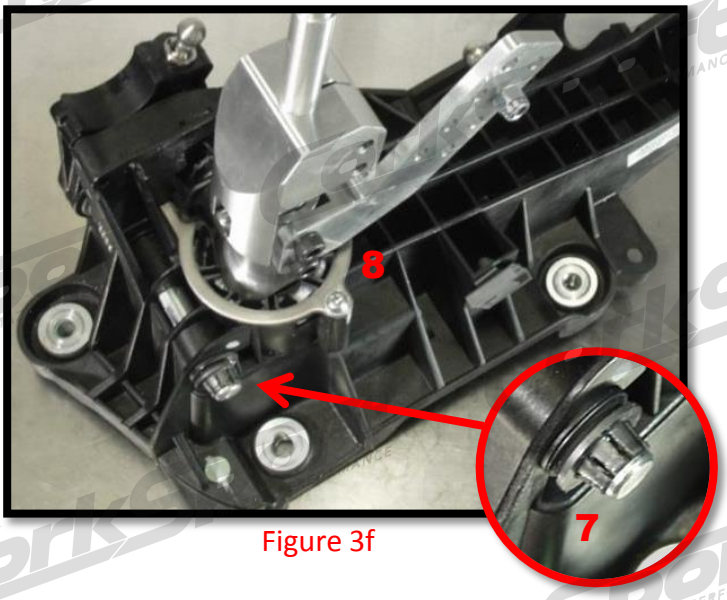


Figure 3f

Proceed to section 6 for installing assembled shifter.

4. Remove the Factory Shifter From the Shifter Housing

(2012-2013 SkyActiv 6 Speed)

a) Remove the metal retaining ring. Use a T-20 Torx driver to remove the two (2) Torx screws and pull the metal ring from the shifter housing (Figure 4a).

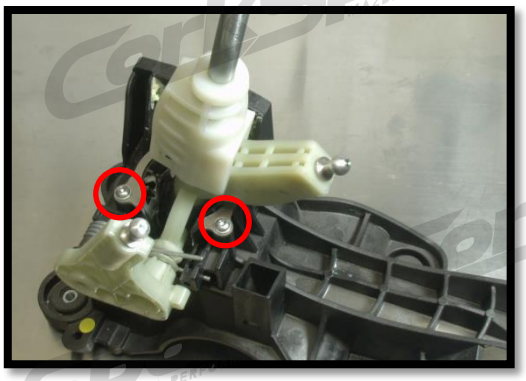


Figure 4a

b) Use a hose tool or needle nose pliers to guide the lower side action spring arm down and towards the yellow colored side action actuator arm. Free it from the peg molded into the shifter housing (red arrow in Figure 4b).

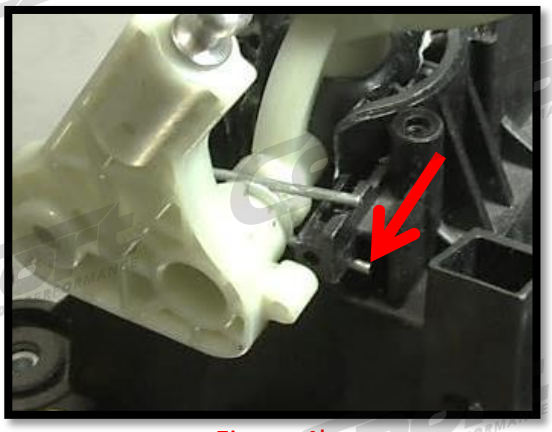


Figure 4b

Use caution when removing the spring from its position. Bending it from its original shape will affect the operation of the shifter.

Hose Tool

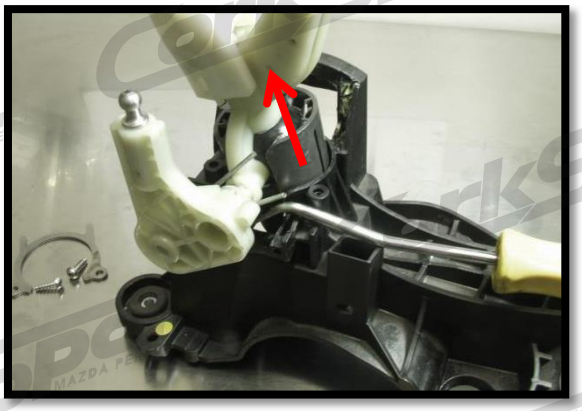


Figure 4c

c) Pull the shift lever upward and remove it from the shifter housing (Figure 4c and 4d).

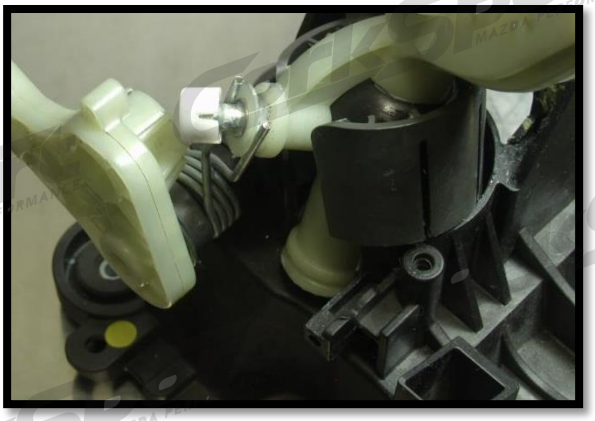


Figure 4d

5. Install the CorkSport Adjustable Shifter into the Shifter Housing

(2012-2013 SkyActiv 6 Speed)

a) **Remove the Shifter Cup (1), Ball Stud Plastic Cap (2) and O-ring (3) from the factory shifter** (as shown in Figure 5a).

Figure 5a

Figure 5b

b) **Apply white lithium grease and push the Shifter Cup (1) onto the CorkSport Adjustable Shifter** (Figure 5b).

c) **Lubricate and push the Ball Stud Plastic Cap (2) onto the CorkSport Adjustable Shifter** (as shown in Figure 5b).

d) **Place the O-ring (3) into the groove at the bottom of the Shifter** (Figure 5b).

e) **Place the assembled shifter partially into the shifter housing** (as shown in Figure 5c).

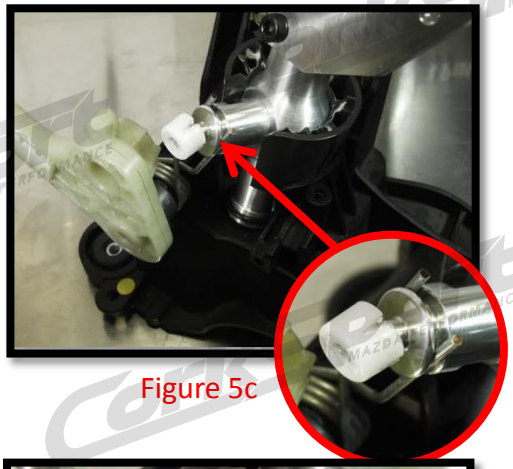


Figure 5c

f) **Spread the spring apart and guide it through the groove in the shifter** (as shown in Figure 5c).

g) **Push the Ball Stud Plastic Cap into the hole in the side action actuator** and guide the shifter further down into the housing (Figure 5d).

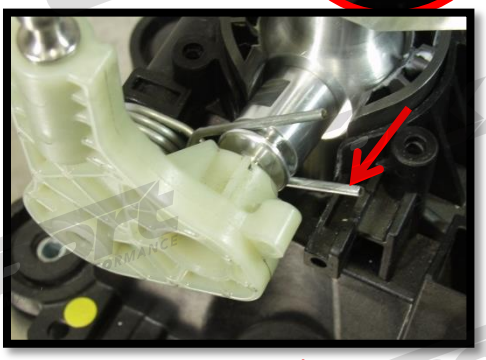


Figure 5d

h) **Use the hose tool or needle nose pliers to route the lower spring arm** (red arrow in Figure 5d). Push the spring arm out of the groove in the shifter and around and under the plastic peg molded into the shifter housing (as shown in Figure 5e).

This part of the process can be difficult. Use patience and caution.

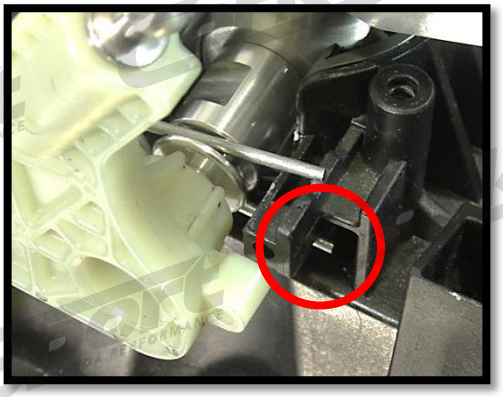


Figure 5e

5. Install the CorkSport Adjustable Shifter into the Shifter Housing (continued)

(2012-2013 SkyActiv 6 Speed)

i) **Replace the Metal Retaining Ring** and fasten it down with the two (2) T-20 Torx screws (red circles in Figure 5f).

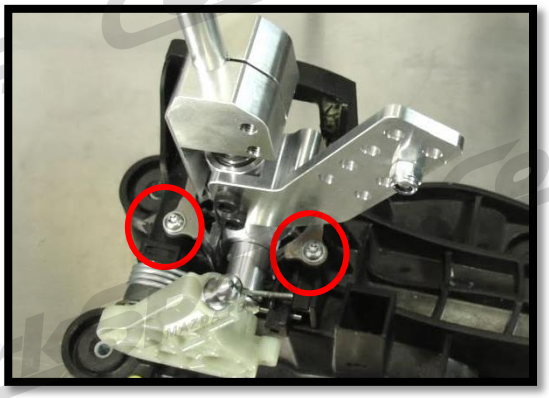


Figure 5f

j) **Work the shifter in all directions to ensure proper installation and lubrication.**

6. Re-Install the Shifter Housing Back Into the Car

These in car installation photos were produced using a 2013 Mazdaspeed 3. 2010-2011 Mazdaspeed 3 and SkyActiv will be very similar.

a) **Guide the shifter housing assembly back into the center console.** Pull the shifter cables and wiring out of the way (Figure 6a).

b) **Line the holes in the housing to the threaded holes in the floor of the console.** Use a 10mm socket to fasten the four (4) screws you removed in step 1g (red circles in Figure 6a).

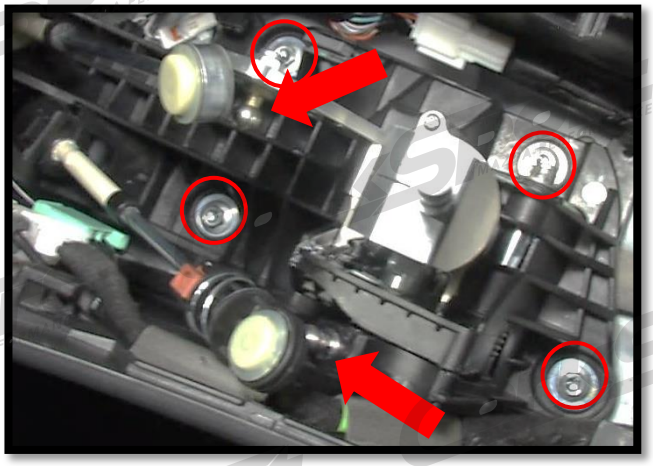


Figure 6a

c) **Clip the shift cables back into their locations in the shifter housing** (Figure 6b).

d) **Lock the shifter throw adjustment ball stud into place** and push the shifter cable ends for both throw and side action cables onto the shifter (red arrows in Figure 6a).

e) **Clip the wiring harness back onto the shifter housing** (Figure 1f).

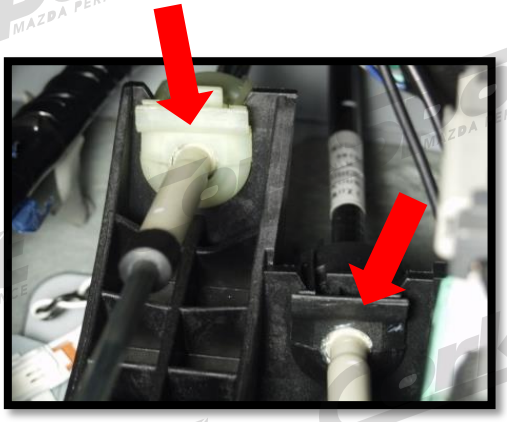


Figure 6b

Now is a good time to try different shifter settings.
See section 7 for adjusting shifter while it is still easily accessible.

These in car installation photos were produced using a 2013 Mazdaspeed 3. 2010-2011 Mazdaspeed 3 and SkyActiv will be very similar.

6. Re-Install the Shifter Housing Back Into the Car (continued)

f) **Place the shift boot panel back onto the center console.** Guide the front ashtray portion into the console (Figure 6c).

Figure 6c

g) **Push the shift boot section downward** and fully clip it back into place (Figure 6d).

Figure 6d

h) **Replace the center console including cup holders. Guide it over the E-brake handle** and clip it back down into place (Figure 6e).

i) **Screw the shift knob back onto the shifter by turning it clock wise** (Figure 6e).

Figure 6e

This completes the installation of your CorkSport Adjustable Short Shifter. Before test driving, shift through all gears including REVERSE and verify FULL ENGAGEMENT for all gears. Check out our knowledgebase for additional install information.

7. Adjusting the CorkSport Adjustable Shifter

The Corksport machined shifter adjusts in two different ways; shifter height and throw and is adjustable in the car!

Throw is the amount of distance the shifter needs to move to change gears. In the Mazda platform with cable shifting only the fore/aft movement of the throw is adjustable i.e. From first 1st –2nd, 3-4th, and 5-6th.

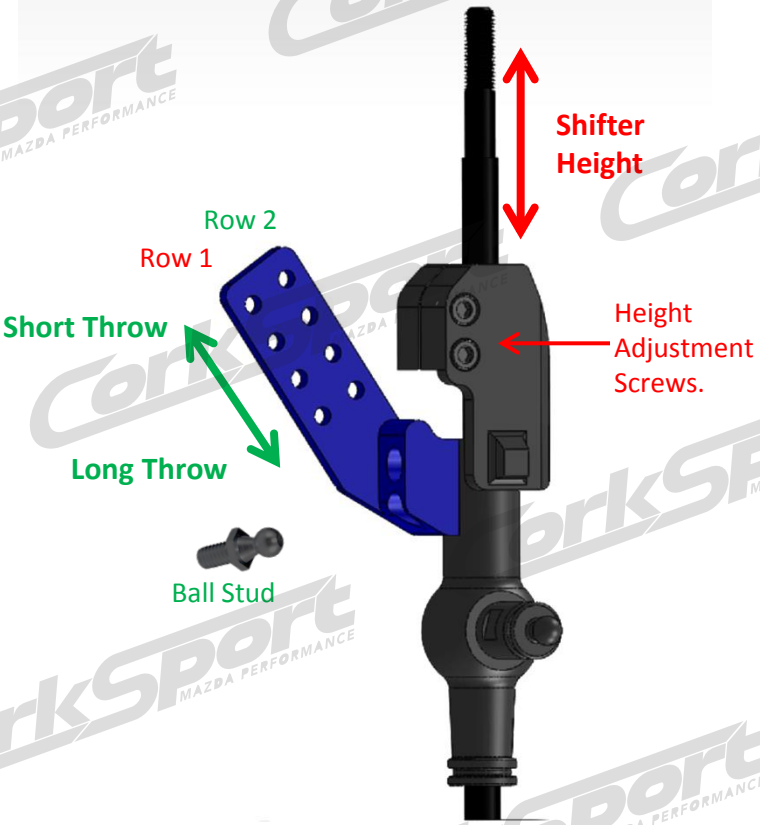
Note: The shorter the throw is adjusted, the more force you have to apply to shift gears.

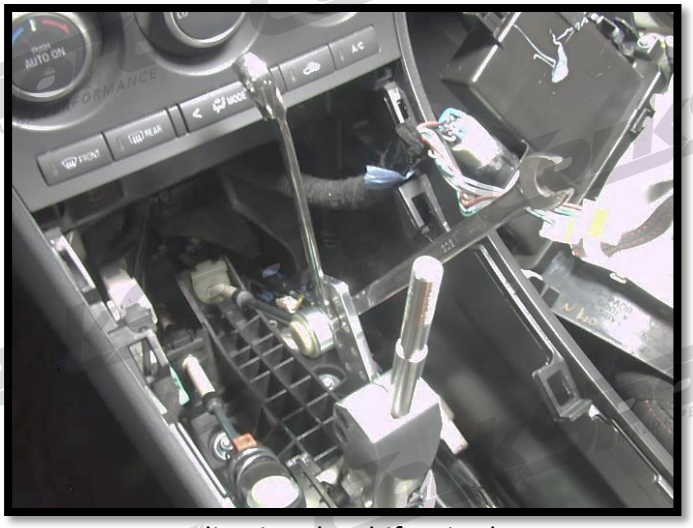
To adjust throw move the ball stud upward the row of holes to shorten the shifter throw, and downward to lengthen throw. With the shifter installed in the car, use two 10mm wrenches to loosen and tighten the ball stud (Figure 7a). For 2012-2013 SkyActiv, 2010-2013 Mazdaspeed 3 and Mazda3 use Row 1. This will keep the neutral position similar to factory. For 2010-2013 Mazdaspeed 3 and Mazda3 you can use Row 2 if you do not like the factory neutral position. At certain shifter heights you might have interference on the bottom of the shifter.

Note: Not all holes in all rows will work well for all cars. After adjusting the throw test the setting by running through ALL gears and make sure they engage fully.

To adjust height, loosen the two (2) 5mm hex screws on the adjustment collar, and slide the shaft upward or downward. Lock the collar in place by evenly tightening the two 5mm hex screws. Downward adjustment is limited to the model of your car. If adjusting the shaft downward make sure the shifter does not drag on the floor of the center console when engaging into reverse gear.

Note: Lowering the shifter will decrease the amount of leverage to engage gear thus shifting will require more force.





Adjusting the shifter in the car with two 10mm wrenches.

Figure 7a

Part # Axl-6-963-10

What's Next:

CorkSport Intake Systems

One of the easiest and most beneficial performance enhancements you can do for your vehicle, the CorkSport Intake systems replaces your factory air box with an open intake system allowing more air into the intake chamber. Available for the Mazda 3 & Mazdaspeed 3 models.

CorkSport Mazda & Mazdaspeed 3 Lowering Spring Set

Give your car the performance appearance and edge you have been looking for with the CorkSport Lowering Springs. The CorkSport Lowering Springs to your Mazda 3 will result in a quicker turning response, crisper road feel, a more aggressive appearance, and a firmer spring rate, while maintaining excellent ride quality. The CorkSport Mazdaspeed 3 Lowering Springs have an average increased spring rate of 25%

CorkSport Hood Strut Kit

Upgrading to hood struts allows extra maneuvering room by replacing your hood prop-rod with CorkSports easy to install hood struts. Lightweight and gas powered these struts help lift and hold your hood with a no frills, no questions asked attitude. Located at the rear of the engine compartment these stay out of the way, while located ideally for leverage and lift capabilities. Made by the same brand as factory equipment, the CorkSport Hood Strut Lift Kit requires no drilling or modifying.